



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,966	04/13/2004	Heinrich Franz Klostermann	A-75035	5319
40461	7590	05/03/2005	EXAMINER	
EDWARD S. WRIGHT 1100 ALMA STREET, SUITE 207 MENLO PARK, CA 94025			NGUYEN, HOANG M	
			ART UNIT	PAPER NUMBER
			3748	
DATE MAILED: 05/03/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/823,966	KLOSTERMANN, HEINRICH FRANZ	
	Examiner	Art Unit	
	Hoang M Nguyen	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 March 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9, 12, 14-16 and 18-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-9, 12, 14-16 and 18-20 is/are allowed.
- 6) Claim(s) 21-26 is/are rejected.
- 7) Claim(s) 27 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

Applicant's amendment dated March 16, 2005, has been fully considered.

Applicant has included the check valve in independent claims 1 and 12, and argued that the applied references do not teach a combination of said check valve and means for repeatedly igniting the air in the chamber. The Examiner agrees and claims 1, 12 and their dependent claims are allowed.

However, claim 21 is not allowable because both of said allowable concepts (check valve and means for repeatedly igniting) are not in claim 21. Applicant has argued that Papp does not disclose an explosion chamber. The Examiner strongly disagrees. Papp discloses on column 9, lines 25-35 that the gas mixture in the chamber can be ignited by the ignition coil 25.

Applicant further argued there is no motivation to combine the references. The Examiner disagrees because the modified concept is simply the cylinders mounted opposite to each other which are well known in the piston-cylinder engines art. Therefore, it would have been obvious to modify one engine in view of the other.

It's suggested that the check valve and means for repeatedly igniting be added to claim 21 to put this application in condition for allowance. For now, claim 21 and its dependent claims are rejected.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 21-26, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4428193 (Papp) in view of U.S. 2984067 (Morris). Papp discloses all the claimed subject matter as set forth above, but does not disclose the means for returning including a second chamber/piston. Morris is relied upon to disclose it's well known to have a crankshaft 10 with cylinders 14, 15, mounted opposite to each other and being used as return means to each other. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to mount the pistons in Papp opposite to each other as taught by Morris for the purpose of more effectively returning the pistons to the top dead center position. Regarding claim 27, it would have been obvious to use a check valve instead of normal poppet valve in Papp for the purpose of preventing backflow.

Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4428193 (Papp). Papp discloses all the claimed subject matter as set forth above, but does not disclose the check valve. However, it would have been obvious to use a check valve instead of normal poppet valve in Papp for the purpose of preventing backflow.

Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-9, 12, 14-16, 18-20 are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (703) 308-3477. The examiner can normally be reached on Monday--Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion, can be reached on (703)-308-2623. The fax phone number for the Examiner is (703) 872-9302 for regular communication, and (703) 872-9303 for after final communication.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.



HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen
4/28/05